are affected simultaneously; when the disease is not controlled, the other textures ultimately become affected.

The disease is extremely obstinate, running a course of from two to three months, yet, when well managed, rarely produces permanent injury to vision. The cornea, though apparently disorganized, resumes its transparency, and the iris its functions, under the influence of those remedies which subdue the inflammation and photophobia. But when allowed to run on uncontrolled, it terminates in coadhesion of the iris and cornea; constricted pupil; opaque capsule, with partial adhesion thereto of the pupillary margin of the iris. If the anterior chamber is preserved, a leucomatous state of the cornea is a frequent result.

The mild, indolent character of the disease, renders it more difficult to subdue, than if more active; and the practitioner is insensibly betrayed into irresolution by the seeming inertness of the disease, and the obvious delicacy of the patient. In this kind of ophthalmia, Mr. G. has never found the detraction of blood either local or general of any avail. The principle of treatment indicated in such cases is, he says, to lessen the irritability of the system, without materially depressing its power. To effect this object, he recommends, as most effectual, emetics, which should be repeated every second or third day for the first week. At the same time ten or twelve grains of Dover's powder should be administered every night, and followed up by a small dose of sulphate of magnesia the next morning. This treatment, he says, will soon give a turn to the inflammation, and reduce the morbid irritability. This being accomplished, mercury must be had recourse to, and introduced into the system, so as to disturb it in the least possible degree. Profuse salivation is not wanted. Its effects are often very decisive long before the gums become affected. Mercury in this disease is a remedy of great value, and will seldom disappoint us, if not too early employed. Blisters he considers as not useful.

Next in importance to mercury he ranks belladonna; without it, he says, the case could not be brought to a favourable termination. The extract should be thickly painted on the eyebrow and eyelid every night at bed time. Besides its influence over the pupil, which is very limited for some time, it has a considerable effect in allaying the local irritability.

Stimulating drops and ointments must be discarded altogether during the acute stage, as well as every other doubtful remedy. The only local application from which Mr. G. has seen any benefit is the steam of warm water containing laudanum. From this the patient generally derives great relief.

When the inflammation has been considerably reduced, and the intolerance of light removed, a little weak precipitate ointment introduced into the eyes twice a week will be of great service in restoring the cornea to transparency. Solutions of nitrate of silver, or muriate of mercury, or *vinum opii* may be occasionally interposed.

In the convalescent state, tonics and sea air are required to complete the cure and re-establish the health. Should the disease lapse into a chronic form, a termination which Mr. G. has occasionally seen, caustic issues superadded to the local treatment will be found successful.

68. *Singular defect of Vision.*—"Mr. Airy, of Cambridge, discovered a few years ago that he did not usually make use of the left eye in reading, and that it was entirely useless on looking at any near object. This he at first attributed merely to habit, and thinking that it might be corrected by calling the left eye into use, he endeavoured to read with the right eye shaded, but found that he could not distinguished a single letter, at least of small print, at whatever distance he placed the book. Some time after, Mr. Airy perceived that the image made in the left eye by a bright point, as a star, or distant lamp, was not circular, but elliptical, the major axis making an angle of about 35°, with the vertical and the upper extremity being inclined to the right. With concave spectacles, (through which distant objects were distinct to the right eye,) Mr. Airy found that, to the left eye, a bright object, as those above-mentioned, had the

appearance of a well-defined line, corresponding to the major axis of the ellipse seen by the same eye unassisted. He also found that if he drew two lines crossing each other at right angles, and placed the paper in a certain position, and at a proper distance, one line appeared perfectly distinct, while the other was scarcely to be seen. On bringing the paper nearer to the eye, the fact with regard to the lines was reversed, the distinct becoming indistinct, and vice versa. 'All these circumstances indicated that the refraction of the eye was greater in its plane nearly vertical, than in that at right angles to it, and that, consequently it would not be possible to see distinctly by the assistance of lenses with spherical surfaces.' Mr. Airy's object then was to construct a lens capable of refracting the rays in a certain point more powerfully than those in the plane at right angles to it; and after various ineffectual attempts, his purpose was effected by a person name Fuller, at Ipswich. One surface of the glass is cylindrical, the other spherical; both are concave. Vision is most perfect when the cylindrical surface is turned from the eye; and Mr. Airy can thus read the smallest print with the left eye as well as with the right, and may thus be said to have recovered the use of an organ, which, but for his own ingenuity, would have been permanently lost."—*London Medical Gazette, Vol. I. No. V.*

SURGERY.

69. *Congenital lateral depression of the Chest.*—M. Dupuytren describes in the fifth volume of the *Répertoire d'Anatomie*, a congenital deformity of the chest, which he says has frequently come under his notice. This deformity consists in a depression of the sides of the chest, a proportional projection of the sternum and abdomen anteriorly, and the vertebral column posteriorly. In children of scrofulous and other cachectic constitutions, affected with this deformity, the sternum projects like a keel; the vertebral column presents quite a lump, whilst the sides are not only flattened, but depressed. This deformity exists to such a degree sometimes, that the two sides of the chest may be embraced with the fingers of one hand. The transverse diameter of the chest is thus considerably diminished, whilst the antero-posterior is enlarged. The function of the organs contained in the chest become impaired, manifested by oppression and catching of the voice, and great anxiety. These symptoms are greatly increased on taking the slightest exercise, just as in cases of diseases of the heart, for which complaint this affection is sometimes taken. During sleep, respiration, impeded by the malformation of the chest, and swelling of the tonsils, is performed with the mouth open, and attended with considerable noise. Sleep is frequently disturbed with painful dreams, and is often interrupted by cries and starts. These symptoms may exist to such a degree as to prevent the development of the vital functions, and produce death at the time of birth. If death does not take place so soon, nutrition will be disturbed, and the children become emaciated. New-born children experience great difficulty in sucking. The deformity is generally accompanied with a considerable swelling of the tonsils, which adds to the difficulty of respiration, and in some cases so much, that M. D. has been obliged to remove a portion of the tonsils. Pulmonary catarrh is also a frequent complication of this malformation, but the most dangerous of all the complaints which supervene on it, is croup.

In the treatment of this affection, M. D. recommends a generous diet, and as much exercise as the patient can endure without producing difficulty of respiration. To these must be added local means, the most efficient of which, he considers to be those which strengthen the extensor muscles of the arm and shoulder, and also pressure on the fore part of the sternum. The kind of exercise recommended by M. D. is the lifting of a weight for many hours a-day. The weight is to be suspended to a rope that passes through two pulleys; the extremity of the rope that is to be laid hold of, ought to be attached to the middle of a lever which is seized by the two hands, whilst the other extremity supports a weight proportioned to the strength of the individual about to raise it. The person standing upright, and even raising himself on his toes to reach the lever, placed at the extremity of the rope, seizes it with both hands, and thus employing the muscles of the forearms, the arms, the neck, and the chest, to bind at the same time the head, the chest, and the body, and to incline them towards the ground, he raises the weight suspended at the other extremity of the rope, and employs alternately the flexors to raise the weight, and the extensors to balance the body. To this kind of exercise must be added pressure on the chest, which should be effected by placing the back of the child against a wall, and pressing against the sternum with the palm of the hand as often, and with as great a degree of force as the strength of the person admits of. This pressure ought to be used ten, or even a hundred times a day, if possible, and its efficacy is proportioned to the continuance of the pressure, and its frequent repetition. By the above means of treatment, M. D. has been enabled to cure patients before supposed to be incurable.

70. *New method of treating Aneurisms of the Ascending or Descending Aorta.*—M. Larrey has communicated to the Royal Academy of France a new method of treating this formidable affection. It is that of Valsalva, conjointly with the constant application of ice to the tumour. The following case, among others, is stated to have been cured by this method. A soldier suffered in consequence of a wound from a varicose aneurism of the crural artery. The size of the tumour exceeded that of the fist. Every operation was impracticable, and the patient was expected soon to die. However, he was subjected to Valsalva's method, (low regimen, rest, and frequent bleedings carried to marasmus,) and the application of ice, and then several moxas. In the space of a few months the tumour was considerably reduced. It was also judged from different signs, that its walls were thickened in proportion to the reduction of its volume. Finally, a complete obliteration of the crural artery took place, and the patient was cured in less than a year.—*Bulletin des Sciences Médicales, December,* 1827.

71. *New method of treating Ranula.*—M. Dupuytren thinks, that the best mode of radically curing ranula is to keep the aperture, made in the tumour, constantly open, by means of a foreign body introduced and kept in the cyst, on the same principle as in the operation for fistula lachrymalis. To effect this object he uses a small cylinder three lines long, and from one line to one and a half lines in breadth, and terminated at each extremity by a small elliptical plate, slightly convex on its free surface, and concave on the surface that adheres to the cylinder; one of these plates is placed inside the sac, and the other should correspond to it externally, that is to say, in the cavity of the mouth. This instrument may be made of silver or platina, the latter is the best. M. Dupuytren has been uniformly successful with this instrument. If the tumour is very large, or if its parietes be thick, it will be convenient, before applying the instrument, to make a large opening into the sac, sometimes even to excise a portion of it, and not to pass the instrument until the wound has almost cicatrized. *Répertoire Genéral d'Anatomie, tom. 5.*

72. *Amputation of the Thigh during the progress of Gangrenous Inflammation.*—George Macdermott, Esq. relates in the *Edinburgh Medical and Surgical Journal,* for April, 1828, the case of a soldier, æt. twenty-two, of sober habits and generally healthy, who suffered a compound fracture of the leg, produced by a fall from a considerable height. The usual treatment was pursued, and no very unfavourable symptoms took place until the fifth day, when the leg became much swelled, œdematous, and of a deadly pale colour, and he complained of a burning heat in the instep. On the morning of the sixth day the fore part of the leg from the knee to the instep was in a state of gangrene; and close to the fracture, the integuments, cellular membrane, and superficial muscles,

were completely sphacelated. The disease was rapidly advancing, and had already reached half way up the thigh—his constitution fast sinking under it—his stomach irritable—his countenance sunk and alarmed in its expression—his pulse low, frequent, and weak.

Under these circumstances, Mr. Macdermott thought that the vigour of his constitution seemed to afford the only chance of saving his life, and without waiting for a line of demarcation to be formed, he immediately amputated the limb about three inches below the trochanter major, which was as low as could be done, the integuments even there being discoloured and œdematous. The patient sunk extremely low after the operation, but revived by the application of stimulants. The suppuration was very considerable for several days, and the sloughing of the cellular membrane so extensive as to require the free administration of wine, tonics, and nourishing food. No exfoliation took place. Six weeks after the accident, the stump had perfectly healed, and the young man was in the enjoyment of excellent health.

73. *Fracture of the Trochanter Major, which may be mistaken for Dislocation of the head of the Femur.* By Edward Stanley, Esq.—Fracture of the trochanter major, combined with fracture of the neck of the femur, has, under certain circumstances, a strong resemblance to a dislocation of the head of the bone. When from the direction of the fracture, one portion of the trochanter has been drawn by the action of the muscles towards the great ischiatic notch, no crepitus may be observable, and a direct source of mistake from the positive resemblance of the fractured portion of the trochanter to the head of the femur, the former occupying the same place which the latter would do in dislocation: and if with these circumstances there should happen to be an inversion of the injured limb, the difficulty of the diagnosis must be considerably increased.

Case I. A woman, æt. sixty, "fell in the street and injured her right hip. On examination, the limb was found slightly everted and shortened to the extent of three-quarters of an inch, but moveable in every direction. The extremity of the shaft of the femur was in its natural situation, but behind the femur and at a little distance from it, a bony prominence was discovered resting upon the ilium, towards the great ischiatic notch, strongly resembling the head of the femur. Various opinions were entertained as to the nature of the injury, some believing it to be dislocation, and others fracture. After a confinement of several months to her bed, the woman was sufficiently recovered to walk with the assistance of a crutch, and in this state she continued till her death, which took place about three years from the date of the accident, during the whole of which period I had watched the progress of the case. Having obtained permission to examine the seat of the injury, I ascertained that there had been a fracture extending obliquely through the trochanter major, and through the basis of the neck into the shaft of the femur, and that the prominence which had been mistaken for the head of the bone, was occasioned by the posterior and larger portion of the trochanter, drawn backwards towards the ischiatic notch.

Case II.—"A man æt. sixty-five had been knocked down in the street. His scull was severely injured, and he had likewise sustained an injury in the right hip. His death took place on the tenth day from the time of the accident. The particulars of the injury sustained by the hip were as follow:—The limb was shortened and everted. Behind, and at a considerable distance from the extremity of the shaft of the femur, a distinct prominence was discovered, so nearly resembling the head of the bone, that it was presumed a dislocation had occurred. On this presumption forcible extension of the limb was made, which shifted the prominence that had been mistaken for the head of the bone. On examination of the hip after death, a fracture was found extending through the trochanter major and through the basis of the neck of the femur. One portion of the trochanter had been drawn backwards into the situation which the head of the bone would occupy in dislocation; but it still retained sufficient connexion by periosteum, with the shaft of the femur, to explain the change in its situation during the extension of the limb."—*Medico-Chirurgical Transactions, Vol. XIII.*

74. *Case of Fracture of the neck of the Femur, with Inversion of the Limb.* By Edward Stanley, Surgeon.—" A middle aged man fell in the street, and his hip struck the curb-stone. The immediate consequences were that the limb was inverted and shortened to the extent of an inch: and no crepitus could be discovered. It was presumed that a dislocation had occurred: and accordingly an extension of the limb was made, and so great was the constitutional irritation occasioned by repeated trials to reduce the supposed dislocation, that the man died about five months from the time of the accident. In the dissection of the hip, a fracture was found extending obliquely through the middle of the neck of the femur, but entirely within the capsule. A portion of the fibrous and synovial membrane on the anterior side of the neck of the bone had escaped laceration." —*Ibid.*

75. *Case of Fracture of the neck of the Femur, without injury to the Synovial and Fibrous Covering.* By E. Stanley.—" A man æt. sixty, was knocked down in the street, and on his admission into St. Bartholomew's Hospital, shortly after the injury, he complained of pain in the hip; but there was neither shortening nor eversion of the limb, and its several motions could be executed with perfect freedom and power. In this absence of all the usual indications, a fracture was not suspected: the patient therefore was merely confined to his bed. At the end of a fortnight he had an attack of inflammation in the intestines, from which he recovered, but suffered a relapse, and died in the fifth week from the date of the accident. On examining the body, no trace of injury was found in the parts around the hip-joint; but on opening the capsule, small effusions of blood, apparently not recent, were discovered beneath the synovial and fibrous membrane, covering the neck of the femur, also beneath the synovial membrane covering the ligamentum teres. The head and neck of the bone were sawed through their middle, and in each portion a dark line, evidently occasioned by the effusion of blood, was seen extending through the bone at the basis of the neck. A fracture was discovered extending along this line; but the broken surfaces were in contact, and the synovial and fibrous membrane covering the neck of the bone was uninjured.

" In this case, if an attempt had been made to walk at the end of two or even three weeks from the accident, a separation of the fractured surfaces and consequent shortening of the limb would have been the result. Hence, in cases where the nature of the injury is doubtful, we may infer the obvious propriety of imposing on the patient a strict confinement to his bed for as great a length of time as if the fracture had been ascertained. Another obvious inference is, the necessity of a minute attention to the circumstances under which the accident occurred; these, in the absence of all clear and decisive indications of the nature of the injury, being often our only guides."—*Ibid.*

76. *Case of complete Dislocation of the Articular Processes and Body of the Fourth Cervical Vertebræ from those of the Fifth, without Fracture.* By W. Lawrence, Esq. Surgeon to St. Bartholomew's Hospital.—Complete dislocations of the vertebræ without fracture, are so uncommon, if we except the first and second bones of the neck, that the possibility of the occurrence has been doubted and even denied by some of the highest authorities. Mr. Lawrence relates in the *Medico-Chirurgical Transactions, Vol. XIII.* the following case which came under his care at St. Bartholomew's Hospital.

A robust, healthy man, æt. twenty-two, was carrying a heavy barrel on the back of his head and neck, slipped in descending some steps, and fell on the buttocks, the burden resting on the head and upper part of the neck. He was immediately deprived of sensibility in the trunk and limbs, and of all power over the voluntary muscles of those parts. When brought to the hospital, in the afternoon of January 8th, "he was completely insensible, and incapable of voluntary motion below the neck. The functions of the brain were not disturbed. Respiration was apparently performed merely by the diaphragm: its descent enlarged the chest, while the elasticity of the thoracic and abdominal parietes restoring the parts which had been previously displaced by the diaphragm, seemed to be the only agent of expiration. The chest was motionless, except towards its inferior margin, and the abdominal muscles were soft. The pulse was weak and slow, and the body cold; the penis was in a state of permanent erection. No irregularity in the line of the spinous processes could be discovered by accurate examination. He was placed on the back in bed with the head carefully supported. In four or five hours the pulse had become full and strong, and the heat of the body was greater than natural; respiration was rather hurried. Venesection to sixteen ounces; a dose of calomel and jalap. Four ounces of urine were drawn off by the catheter.

"*Jan. 9th.*—He dozed in the course of the night, but did not sleep. There is pain in the lower part of the neck. He can move the arms very slightly, and has a little feeling in the front and upper part of the chest. Dark offensive stools have been passed involuntarily. When the catheter was introduced in the morning, only a table-spoonful of urine came away: six ounces of high-coloured urine were drawn off in the evening. Respiration is slower, the pulse full, heat natural. Saline draught every six hours.

"*10th.*—Feels better this morning, having slept three or four times in the night for about an hour each time. Has experienced a tingling sensation in the hands, and is sensible to impressions on the upper part of the arms and thighs: stools have passed involuntarily; he complains of distention of the bladder; eighteen ounces of high-coloured urine were drawn off, and deposited a dark brown sediment. The priapism continues. Four ounces of urine drawn off in the evening.

"*11th.*—He has not slept during the night, and is worse this morning. Respiration becomes difficult, so that speaking requires a painful effort; and the countenance expresses distress and anxiety. The tongue is light brown, and dry in the middle. Fæces have passed involuntary, and six ounces of urine, lighter coloured than that of yesterday have been drawn off. Breathing became more laborious in the evening, and the countenance extremely anxious; the pulse weak and low, surface of the body cold. He expired at one in the morning of the 12th, from increasing embarrassment in respiration.

"*Examination.*—No displacement nor irregularity could be discovered by external examination when the body was laid on the face. After cutting away the muscles from the back of the spine, the cartilaginous surfaces of the superior articular processes of the fifth cervical vertebra came into view: they were exposed in consequence of the inferior processes of the fourth vertebra having been completely dislocated forwards, and remaining fixed in their unnatural position. The yellow ligaments connecting the laminæ of the two vertebræ, (ligamenta subflava,) were torn through, and the bifid apex of the fourth spinous process lay in close contact with the basis of the fifth. On the front of the column an unusual projection was observed, but the anterior longitudinal ligamentous expansion was entire. The body of the fourth was completely detached from that of the fifth vertebra, the connecting fibro-cartilage being torn through, and the body of the former projecting by its whole depth in front of the latter. In consequence of this displacement, the antero-posterior diameter of the vertebral canal is lessened by about one-third. The section of the bone was not made till some days after death, so that the recent state of the spinal marrow could not be estimated."

Death was caused by the paralysis of a large portion of the muscles of respiration, and by the consequently imperfect mode in which the mechanical phenomena of that function were executed.

77. *Cases of Lithotomy.*—Mr. Liston has published in the *April No.* of the *Edinburgh Medical and Surgical Journal*, twenty-nine cases of lithotomy performed by the lateral method, of which twenty-seven were successful, and one of the fatal cases can scarcely be attributed to the operation; the patient died suddenly apoplectic fourteen days after the operation.

78. *On the Operation of Lithotomy.*—Mr. Crichton has published in our esteemed cotemporary, the *Edinburgh Medical and Surgical Journal*, for April, 1828, some interesting observations on the operation of lithotomy. He objects to the term *dissection*, as employed by writers in their instructions for the performance of this operation, as the idea which we attach to that term is the slow and cautious division of a part, fibre by fibre. In the dead subject no inconvenience can result from this, but on the living body every unnecessary incision is unwarrantable cruelty, as well as adding to the danger of the operation. He very correctly remarks, that two, or at most three strokes of the scalpel are sufficient to lay bare the membranous part of the urethra; and certainly the less the parts are mangled, and the more direct and continuous the opening is, the less risk there will be of urinary infiltrations and sloughing sores.

There is, Mr. C. says, great want of clearness in the directions given by authors for finding and laying hold of the stone. Directions are given as if the stone were to be searched for in a distended bladder, or an empty space; whereas, when the bladder is laid open the urine escapes, and the bladder contracts around the stone, and the latter is to be found close to the opening, at least it has been so in nearly one hundred cases, in which the operation has been performed by Mr. C. The difficulty and delay in finding it, is owing, he thinks, to operators not adverting to this plain circumstance, and consequently "the forceps are at one time passed over the stone carrying the coats of the collapsed bladder before their point; they are opened and shut, shut and opened; they are pushed this way and that way, and still nothing is found; the stone all the while lying behind the blades. At another time the stone is pushed before the points of the forceps, and a portion of the bladder contracting around it like the finger of a glove, it cannot be laid hold of. The like may also possibly happen from the bladder being too much distended with urine, in consequence of the cruel and absurd practice recommended and sometimes adopted, of compressing the urethra for some hours before operating, in which case the bladder, when suddenly emptied, may collapse irregularly, and retain the stone, especially if it be a small one, betwixt its folds."

Mr. C. recommends attempting to unite the wound by the first intention. In a patient of good habit of body, when the incisions have been properly conducted, the stone not large and readily extracted, and when the urethra and prostate gland have been divided by one cut, without hacking and mangling, there is reason, he says, to think the attempt might not unfrequently succeed, and thereby divest the operation of much of its terror and accompanying distress. "It is only," he adds, "within these few years that my attention has been directed to this part of the subject: and I have already had the satisfaction of witnessing the wound made in the operation healed by the first intention in five instances, the urine passing off by the urethra from the commencement, and continuing to do so, whereby the cures were remarkably expedited. One of these cases was a child of nineteen months, where the wound did not require a second dressing. In another of three years, the child was out, and going about within eight days after the operation. A third was five years; and the other two of seventy years. The two old men were each out of bed, and walking about the room, within three or four days after the operation."

Mr. C. has performed the operation of lithotomy for thirty-six years, without in one instance declining to operate, however unpromising the case may have been; and he has given a list of seventy operations, (two in females,) performed on individuals of various ages, from one year and a half to eighty-five years, of which nine were unsuccessful. Of these latter, five, or perhaps six,